

REMARKS

This is in response to the Official Action of December 19, 2003. Entry of the Amendment, reconsideration, and allowance of the application is respectfully requested.

The claims have been extensively amended, as can be seen, to overcome the rejections under 35 U.S.C. § 112, and also to define non-obviousness over the references.

Claims 21-25 have been canceled, and both claims 1 and 12, the independent claims, have been amended to bring about allowance, it is respectfully submitted.

The claims have been amended to refer to a plurality of groups of one or more battery cells while in use in an uninterruptable power supply. The method claimed now comprises measuring the AC voltage components using the plurality of simultaneous electrical connections connected across each group of cells.

Also, the claims have been amended taking into consideration of the rejections under 35 U.S.C. § 112.

The basis for the amendments to claim the plurality of groups of one or more battery cells is shown in Figures 2 and 3, and from the original description, page 12, line 33, to page 13, line 18. Original claim 1, in combination with original dependent claims 3 and 4 also provides support for these amendments.

Claim 1 also has been restricted to voltage measurements by deleting the current measurement alternative. Current measurement is added in dependent claims 6 and 7.

Original claim 12 has been deleted, and apparatus claim 13 has been amended to include simultaneous electrical connections, and the plurality of groups of cells.

Claims 21-25 have been canceled.

Amended claims 1 and 13 now refer to the arrangements shown in Figures 2 and 3, in which a plurality of simultaneous

electrical connections are connected to a voltage measuring device arranged to measure an AC component of voltage across each group of battery cells, while the battery cells are in use.

The claims were originally rejected as being unpatentable over the Jonsson Patent No. 5,457,377, under 35 U.S.C. § 102. The Examiner set out the components in the Jonsson reference in relation to claims 1-3, 5, 6, and 12-15.

Claim 3 was rejected as being unpatentable over the Jonsson patent.

The Examiner also indicated that claims 4, 9-11, and 16-25 were objected to, but would be allowable if rewritten. These claims have not been rewritten in exact wording, but concepts from the claims have been incorporated into the amended independent claims.

The Jonsson patent discloses a system for measuring a UPS battery using a single pair of connections that are connected across the battery under test. The claims as amended therefore, provide a substantial differentiation not only in structure, but also in operation over the Jonsson patent, and they are believed to be patentable.

The use of multiple simultaneous connections connected to a voltage measuring device arranged to measure to the AC components of voltage across each group of cells, enables the automatic testing and comparison of the state of operating charge of all of the groups of battery cells in the UPS, either separately, or as a whole. The Jonsson patent, however, relates to a test system that only tests complete batteries. The present claims deal with battery cells and groups of battery cells and the claims therefore are not suggested by Jonsson, it is believed, and therefore not obvious.

The phrase "the or each" has been corrected.

Therefore, entry of the amended claims is respectfully requested, and a Notice of Allowance is respectfully solicited.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN CHAMPLIN & KELLY, P.A.

By:

Nickolas E. Westman, Reg. No. 20,147  
Suite 1600 - International Centre  
900 Second Avenue South  
Minneapolis, Minnesota 55402-3319  
Phone: (612) 334-3222 Fax: (612) 334-3312

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